



February 29, 1968
FOR IMMEDIATE RELEASE

S.G.W.U. RESEARCH TURNS DISCOTHEQUE INTO PSYCHOLOGY LAB

Two Sir George Williams University researchers have designed an electronic lighting and sound system which will soon transform a downtown Montreal discothèque into a psychology laboratory.

Dr. George Marshall, Assistant Professor of Psychology, and research assistant Dennis Beatty, an electronics engineer, have developed a system which converts sound to light - different registers having corresponding colours, the intensity of colours varying with the volume of the sounds.

It has been installed in the Chameleon, a downtown discothèque, whose owners have agreed to allow the young research team to use the club for their experiments on coordinated stimulation to the senses. The discothèque is located just across from the University's Hall Building on Maisonneuve Boulevard.

Research started a year ago with a concern with the aesthetics of coordinating light and music - what happens when people see a picture of what they are hearing? Two prototypes were constructed, one with three colour channels and a more elaborate system with five. These automatically coordinate the intensity of sound with the intensity of coloured light, and the frequency or pitch of the music with the frequency or colour of the lights. When the lights are projected in various ways, the result is a moving abstract mosaic of colour identical to the intensity, tone and pattern of the music.

And what happens when people see a picture of the music or language they are hearing? Preliminary observations show the results to be, not surprisingly, extremely pleasant. Beatle Paul McCartney has predicted, "In the future all records will have vision as well as sound. In twenty years time people will be amazed to think we just listened to records." A number of kinetic artists have recently been concerned with this development. Dr. Marshall says, "Labels are beginning to mean very little these days since the division between the arts, the physical, and the behavioral sciences is more arbitrary than real. The study of problems as broad as communication, multi-media, and environments cuts across many disciplines. Mr. Beatty and I find ourselves both contributing to the technical, psychological, communication, multi-media, coordinated media, aesthetic, total environment, clinical and research aspects of our work."

Dr. Marshall explained some of the fascinating implications research on coordinated sensory stimulation will have for various fields of study. These range from the McLuhan-like concern with total environment, multi-media and communication to more clinical investigation.

A student of his is now investigating the experience of poetry with and without light feedback. The level of the subjects' involvement is also being manipulated by having them either passively listen to another's reading or actively participate by reading the poetry themselves into a microphone which translates their words into colour.

Similar studies will be made of the experience of music with and without light feedback. Will those who have difficulty following music - its beat, melody or pattern - find the music easier to understand, more pleasurable, easier to remember when they see a picture of it? Will musicians, when they receive both visual as well as auditory feedback, create music differently, possibly according to the changing pattern, colour and intensity of the lights? Perhaps a musician will want to play more blue, or smear more green at a particular point.

Artists, musicians and critics have difficulty agreeing on what makes a good piece of music or art, and in fact cannot agree on the dimensions of analysis. Possibly making a piece of music, poetry or prose more concrete by visual feedback might give an approach to art analysis.

Another area of research is in the study of synesthesia - experiencing colours when solely listening to music, for example. Can synesthesia be induced or taught?

Some work of a more clinical nature in which simultaneously coordinated light-sound feedback would appear to have important implications is in the speech training of the hard of hearing. Speech therapists might be greatly helped in teaching rhythm and intonation of speech to the hard of hearing through the application of coordinated sensory feedback.

"It is somewhat amusing that a psychology laboratory should exist in the day in the same place as a discothèque at night," said Dr. Marshall. "But we shouldn't be too surprised. What occurs in a discothèque and a psychology laboratory is connected. The barriers between academic areas are not the only walls which are crumbling."

From the office of: Malcolm Stone,
Information Officer



Le 29 février 1968
POUR PUBLICATION IMMEDIATE

UNE DISCOTHEQUE TRANSFORMEE EN LABORATOIRE DE PSYCHOLOGIE
PAR DEUX CHERCHEURS DE L'UNIVERSITE SIR GEORGE WILLIAMS

Deux chercheurs de l'Université Sir George Williams, le Docteur George Marshall, professeur de psychologie et Monsieur Dennis Beatty, ingénieur électronique, ont mis au point un système électronique de sons et de lumières devant transformer sous peu, une discothèque du centre de la ville en laboratoire de psychologie.

Cet équipement électronique, visant à contrôler presque totalement la musique et l'éclairage de ce nouvel établissement, permettra aux deux chercheurs de poursuivre leurs expériences sur le comportement des gens devant les sons et les couleurs.

Le propriétaire de cette nouvelle discothèque, surnommée "Le Caméléon" et située face à l'édifice Hall sur le boulevard de Maisonneuve, a permis aux deux chercheurs de poursuivre leurs travaux pendant que la discothèque fonctionnera de façon commerciale.

Ce système électronique est composé d'une sorte d'"orgue lumineux" traduisant en lumière, sur des panneaux translucides, les sons de la musique jouée par les tables tournantes. A chaque registre sonore correspond une couleur, tandis que l'intensité de l'éclairage varie en fonction du volume du son.

Selon le Docteur Marshall, c'est la première fois à Montréal qu'un psychologue travaille en collaboration avec un technicien et homme de science dans le domaine des arts d'agrément et des loisirs. Il souligne que: "Jusqu'ici, on a vu souvent des artistes collaborer avec des techniciens, mais jamais on n'avait encore fait appel aux spécialistes des sciences humaines, sociologie, psychologie, qui pourtant en auraient sûrement beaucoup à dire dans ce domaine. Je pense que dans l'avenir, ils auront eux aussi un rôle très important à jouer dans la création des décors et des atmosphères dans lesquels les gens vivent et se détendent."

Monsieur Marshall a choisi cette discothèque comme lieu d'expériences car il a déjà fait des études sur le comportement des adolescents et des jeunes adultes. Il fera également des essais sur la réaction des gens aux odeurs, au toucher et à divers stimuli sensoriels.

Son associé, Monsieur Beatty, qui poursuit des études post-universitaires à SGW, a participé à la conception et à la réalisation de systèmes électroniques de plusieurs pavillons de l'Expo '67. Après maintes rencontres, Monsieur Beatty et le Docteur Marshall décidèrent de mettre au point des appareils électroniques permettant d'étudier le comportement des gens. Leurs travaux débutèrent il y a environ un an.

Par la suite, les chercheurs ajouteront d'autres appareils et entreprendront d'autres expériences qui amèneront peut-être un changement complet du décor.

Du bureau de: Malcolm Stone,
Directeur de l'Information

YB.